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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,502	07/15/2004	Li Li	ACMP0124USA	4501
27765 7590 09/06/2007 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER CHAI, LONGBIT	
			ART UNIT 2131	PAPER NUMBER
			NOTIFICATION DATE 09/06/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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mn

Office Action Summary	Application No.		Applicant(s)	
	10/710,502		LI ET AL.	
	Examiner		Art Unit	
	Longbit Chai		2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/12/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for benefit of foreign priority under 35 U.S.C. 119 (a) – (d) is acknowledged.

The application is filed on 7/15/2004 but has a foreign priority application filed on 7/17/2003.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 recites the limitation "the first memory". There is insufficient antecedent basis for this limitation in the claim. Examiner suggest to replace the claim 7 "The method of claim 1" with "The method of claim 2" so that a first memory is clearly recited in claim 2 that claim 7 depends from to resolve the issue of insufficient antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1 – 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Colward (U.S. Patent 5,802,277).

As per claim 1, Colward teaches a method for **scanning data of an optical disk for viruses by an optical disk drive** (Colward: Column 4 Line 13 – 14 / Line 63 – 65 / Line 49 – 51 / Line 34 – 39: (a) CD-ROM drive is a read-only “optical disk” drive and (b) a disk drive is considered as a computer entity that provides accessing of the disk data, synchronizing of read / write activities and transferring of disk data to / from the computer system – Colward teaches scanning / detecting the presence of a boot sector virus in the boot record of a diskette when loaded from the disk drive prior to executing boot program and loading operating system code into the system);

the disk drive scans the boot sector virus prior to executing boot program and loading operating system code into the system), **the method comprising:**

reading the data of the optical disk (Colward: Column 4 Line 63 – 65, Column 4 Line 13 – 14 and Column 3 Line 15 – 16: preventing the virus infection from a diskette carrying a boot sector virus and detecting the presence of a boot sector virus in the boot record of a diskette loaded in the diskette drive by first reading the data from a boot sector of a CD-ROM and comparing with a known virus signature); and

comparing the data of the optical disk with a virus code stored in the optical disk drive to scan the data of the optical disk for viruses (Colward: Column 3 Line 15 – 16 / Line 30 – 35 and Column 4 Line 13 – 14: the virus signature is qualified

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as a virus code and scanning / detecting boot sector virus by a disk drive against the stored virus signature prior to executing boot program).

As per claim 9, Colward teaches **an optical disk drive for reading data of an optical disk** (Colward: Column 4 Line 63 – 65, Column 4 Line 13 – 14 and Column 3 Line 15 – 16: (a) CD-ROM drive is a read-only “optical disk” drive (b) preventing the virus infection from a diskette carrying a boot sector virus and detecting the presence of a boot sector virus in the boot record of a diskette loaded in the diskette drive by first reading the data from a boot sector of a CD-ROM and comparing with a known virus signature), **the optical disk drive comprising:**

a first memory for storing a virus code (Colward: Column 3 Line 30 – 35: the virus signature is qualified as a virus code stored in read-only memory (or a non-volatile memory) being considered as a first memory);

second memory for storing data temporarily (Colward: Column 5 Line 1 – 6: the boot sector code is loaded from the disk into the RAM and is compared against a known virus signature, where the RAM is qualified as a second memory; besides, the data being read from the disk for virus checking must be stored in the RAM instead of ROM); and

a controller for controlling the data of the optical disk to be temporarily stored into the second memory (Colward: Column 4 Line 10 – 14, Column 5 Line 1 – 6 and Column 3 Line 15 – 16: a disk drive includes a controller circuitry to synchronize read / write activities and transfer disk data to / from the computer system (Microsoft

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Computer Dictionary: Page 165) and scanning the diskette for boot sector viruses is indeed temporarily stored into the RAM for virus signature comparison – i.e. the controller loads the boot sector code @ CD-ROM into the RAM for virus scanning), and **comparing the data of the optical disk stored in the second memory and the virus code stored in the first memory to scan the data of the optical disk for viruses** (Colward: Column 3 Line 15 – 16 / Line 30 – 35 and Column 4 Line 13 – 14: the virus signature stored in the ROM is qualified as a virus code and scanning / detecting boot sector code by a disk drive after being read into the RAM against the stored virus signature prior to executing boot program).

As per claim 2, Colward teaches storing the virus code into a first memory of the optical disk drive (Colward: Column 3 Line 30 – 35: the virus signature is qualified as a virus code stored in read-only memory (or a non-volatile memory) being considered as a first memory).

As per claim 3, Colward teaches storing the data of the optical disk into a second memory of the optical disk drive (Colward: Column 5 Line 1 – 6: the boot code is loaded from the disk into the RAM for virus scanning and the RAM is considered as a second memory; besides, the data being read from the disk for virus checking must be stored in the RAM instead of ROM):

As per claim 4, Colward teaches the data of the optical disk is stored in a sector (Colward: Column 4 Line 49 – 51 / Line 63 – 64: the data of the optical disk is stored in a boot sector).

As per claim 5, Colward teaches generating an alarm when the data of the optical disk matches the virus code in the first memory (Colward: Figure 4 / Element 270 and Column 5 Line 14 – 17: displaying virus found message as an alarm message).

As per claim 6, Colward teaches stopping reading the data of the optical disk when the data of the optical disk matches the virus code in the first memory (Colward: Figure 4 / Element 280, Column 5 Line 14 – 17 and Column 4 Line 49 – 51: the optical disk is scanned and virus is detected prior to the infection of the computer system – i.e., prior to reading / loading the software component of the operating system into the computer system and as such the boot operation is halted and the reading of the software component of the operating system data is stopped to prevent the infection to the computer system).

As per claim 7 and 10, Colward teaches the first memory is a non-volatile memory (Colward: Column 3 Line 30 – 35: the virus signature is qualified as a virus code stored in read-only memory (also, a non-volatile memory) being considered as a first memory).

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As per claim 8 and 11, Colward teaches the second memory is a random access memory (RAM) (Colward: Column 5 Line 1 – 6: the boot code is loaded from the disk into the RAM for virus scanning and the RAM is considered as a second memory; besides, the data being read from the disk for virus checking must be stored in the RAM instead of ROM).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


LBC

Longbit Chai
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Art Unit 2131


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